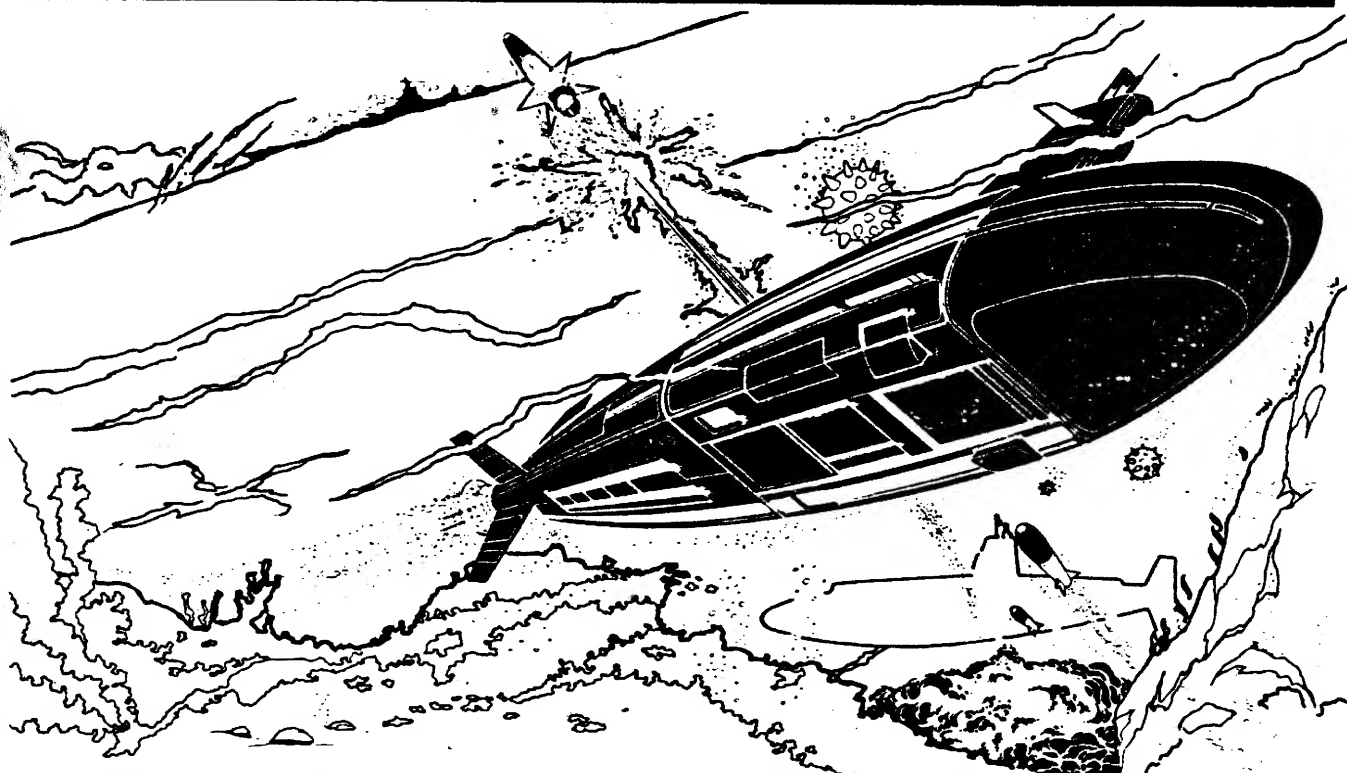


POLARIS™

COLOR







SERVICE INSTRUCTIONS AND PARTS CATALOG



TAITO CORPORATION

5. Play Instructions

- o Insert coin(s).
- o Select game 1 or 2 players.
- o Shoot jet planes  , frigates  , enemy subs  , and airplanes  for points, while avoiding enemy attack.
- o Scoring:



??? Pts.



??? Pts.



100 Pts.



50 Pts.



30 Pts.



10 Pts.

- o In a two player game, play alternates between the two after each missing.

Additional Information:

- o Homing missiles and mines cannot be destroyed.
- o When a anti-sub airplane is hit, some mystery points (500, 1000, 1500, or 2000 points) are scored.
- o When an enemy sub is hit, some mystery points (300, 500, 700, or 900 points) are scored.
- o When score exceeds 5,000 points, one sub is added with music.
- o As the frame progresses, the bonus points increse from 1,000 to 9,000 points.
- o Game is over when all of player8s subs have been destroyed.

6. Adjustments on Switching Regulator PC Board

(See Fig. 3)

Caution: The line voltages should be set within the limit.

Failure to do so may result in destruction of the IC's.

o To check the output voltage, measure them on the G-connector or the T-connector.

(See the cable block diagram, in this manual.)

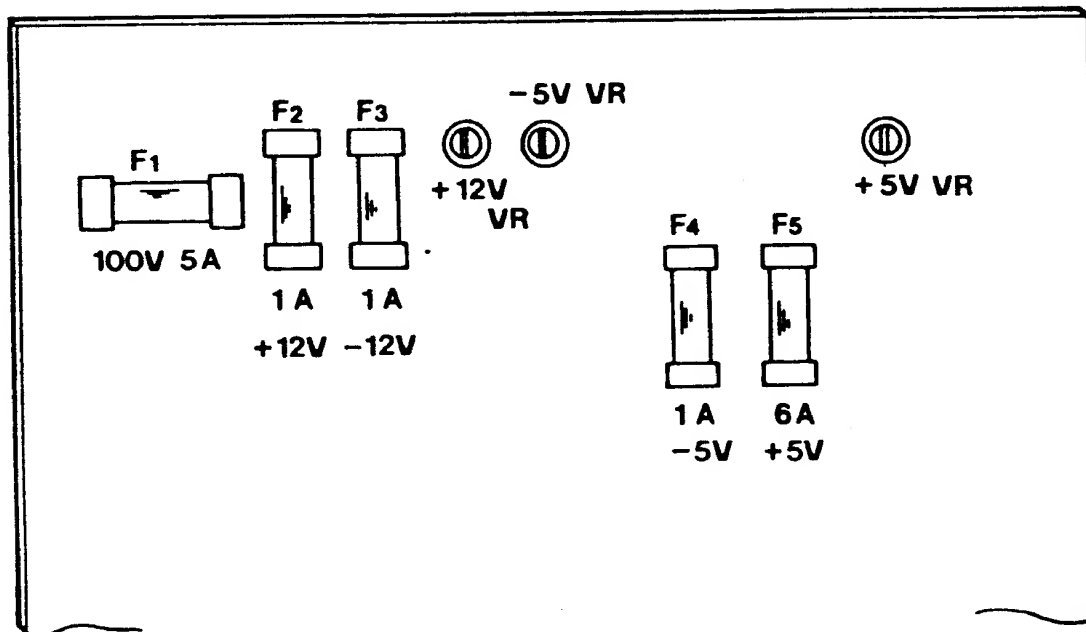


Fig. 3

- o +5V VR ... Pot for adjusting +5V DC line voltage
(Adjustable range: +4.5V to +5.5V DC)
Set approx. +5V.
- o -5V VR ... Pot for adjusting -5V DC line voltage
(Adjustable range: -5.5V to -4.5V DC.)
Set approx. -5V.
When the +5V line has no load, this -5V voltage is not present on the line.
- o +12V VR .. Pot for adjusting +12V DC line voltage
(Adjustable range: +10.3V to +13.2V DC)
Set approx. +12V.

7. Adjustments on Game PCB (See Fig. 4 and Table 1 - 3)

- o To decrease the sounds turn each pot as shown by the arrowhead.

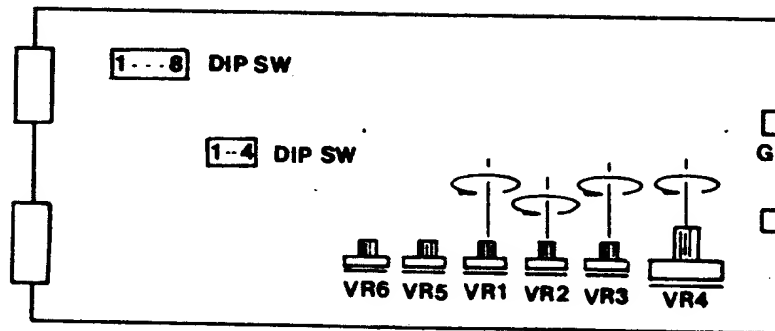


Fig. 4

- * VR1 ... Pot for adjusting the effective sounds; firing sounds, anti-sub airplane nose diving sounds, bomb hit sounds, jet plane hit sounds, and frigate hit sounds.
- * VR2 ... Pot for adjusting frigate appearing sounds and enemy sub hit sounds.
- * VR3 ... Pot for adjusting the music produced when bonus points are scored or an extended play is awarded.
- * VR4 ... Pot for adjusting the total sounds.
- * VR5, VR6 ... These pots are for adjusting the solid-state modules, which are for factory adjustments.

Setting of DIP Switches:

DIP SW1

- * SW1, SW2 ... Switches for changing the number of player's subs (POLARIS)

Polaris	3	4	5	6
SW 1	ON	OFF	ON	OFF
SW 2	ON	ON	OFF	OFF

Table 1

This number is preset at "3" at the factory.

- o SW3 ... Switch for Game Style

SW 3	ON	Upright Version
	OFF	T T Version

Table 2

As this game is an upright version, this switch should be set at "ON" position.

- o SW4 ... Switch for checking game features

When this switch is set at "OFF" position, no hits are made if bombs hit player's sub.

Normally, this switch should be set at "ON" position.

- o SW5 ... Switch for demonstration sounds

Effective sounds for appealing to the customers can be produced. (Polaris sounds)

SW 5	ON	No sounds are produced.
	OFF	Sounds are produced.

Table 3

- o SW6,SW7 ... These switches are not used in this game, and should be set at "OFF" positions.

- o SW8 ... Switch for Preset Mode

When this switch is set at "OFF" position, the check can be mode. When checking, each switch should be set first. Normally this switch should be set at "ON" position.

1 PLAYER START SW ... 1P's points are increased by 50 points.

2 PLAYER START SW ... 2P'S points are increased by 50 points.

1 PLAYER UP SW The levele becomes high.

1 PLAYER FIRE SW The game starts.

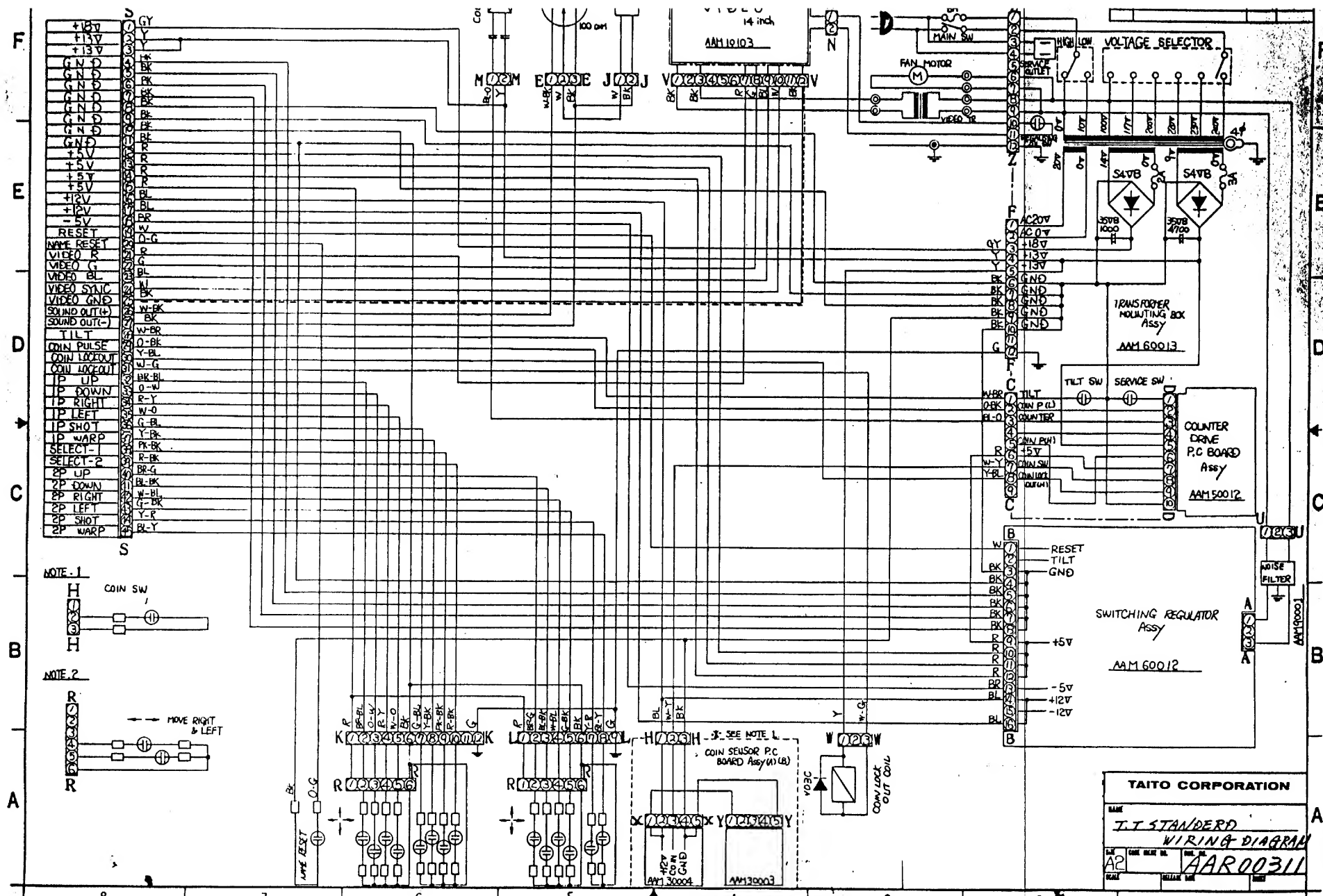
DIP SW2

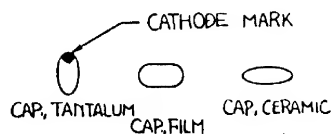
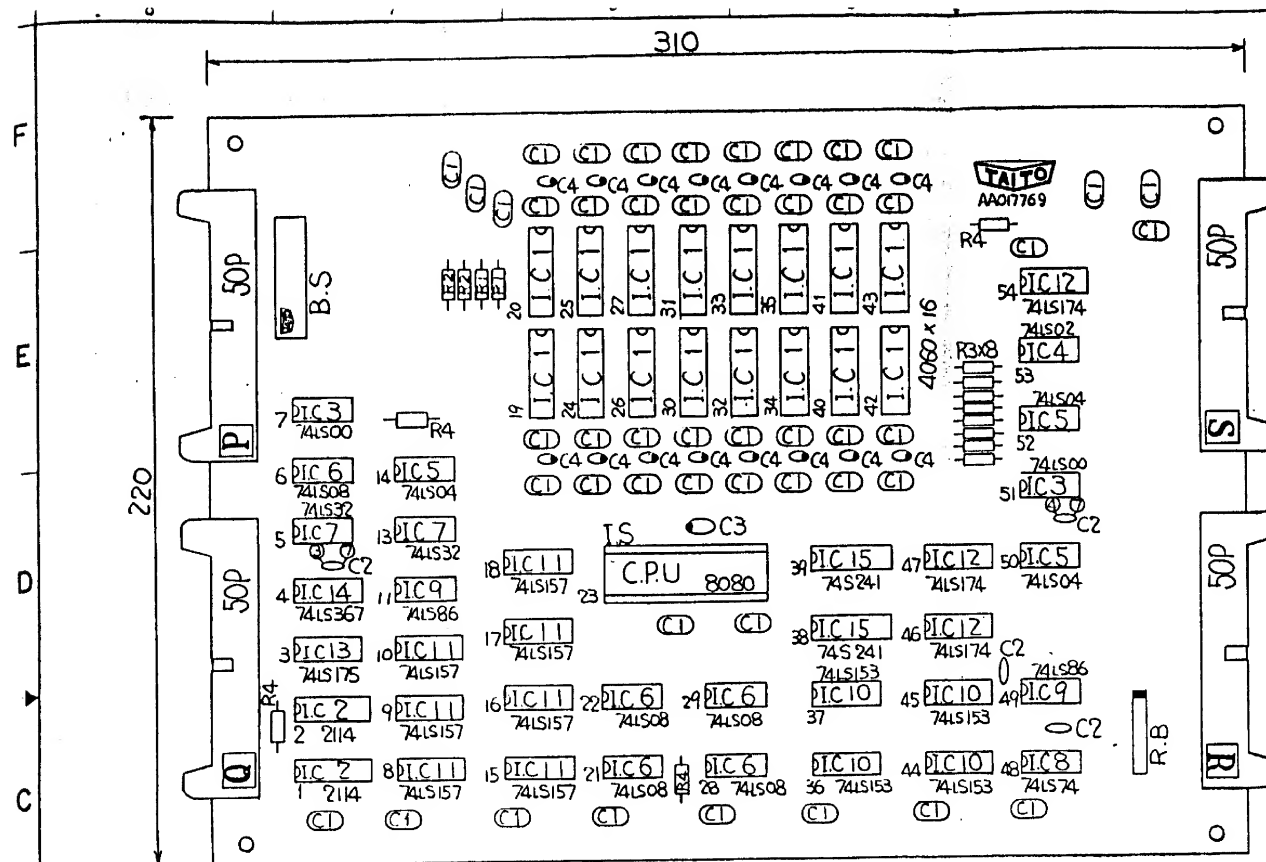
- o SW1-SW3 ... These switches are not used and ahold be set "OFF" positions.

- o SW4 ... Switch for Screen Inversion

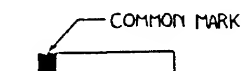
"ON" ... Inversion "OFF" ... No Inversion

Normally, this switch should be set at "OFF" position.





NOTE - 1. CAP.



NOTE - 2. RESISTOR BLOCK

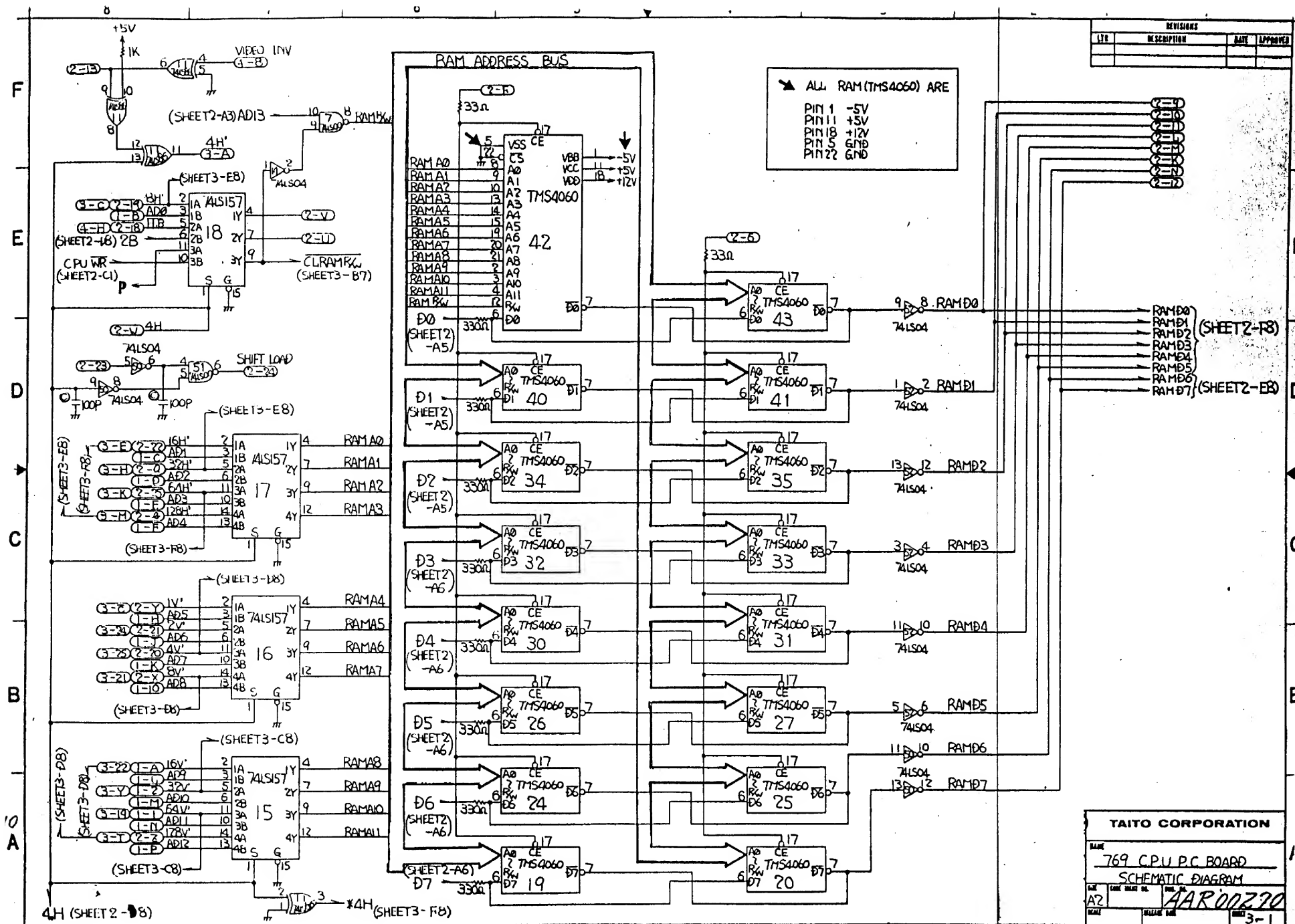
REVISIONS			
LTG	DESCRIPTION	DATE	APPROVED

47						
46						
45						
44						
43						
42						
41						
40						
39						
38						
37						
36						
35						
34						
33	R.B	AAT 55041	RESISTOR BLOCK	470ohm Resistors	1	
32	R4	51765	RES. CARBON	1Kohm 1/4W 5%	4	
31	R3	51763		330	8	
30	R2	51745		150	2	
29	R1	51729	RES. CARBON	33ohm 1/4W 5%	2	
28	C4	41425	CAP. TANTALUM	SSG 25-1F	16	
27	C3	41424	CAP. TANTALUM	SSG 16-22F	1	
26	C2	41318	CAP. CERAMIC	50V 100PF	4	
25	C1	41244	CAP. FILM	TDY-1H-104	49	
24	IC5	35001	BUS DRIVER	74S241	2	
23	CPU	34001	C.P.U	THS8080	1	
22	IC4	33203	L.S	I.C	74LS367	1
21	IC3	33128			74LS175	1
20	IC2	33127			74LS174	3
19	IC1	33112			74LS157	7
18	IC0	33108			74LS153	4
17	IC9	33062			74LS86	2
16	IC8	33051			74LS24	1
15	IC7	33027			74LS32	2
14	IC6	33009			74LS08	5
13	IC5	33005			74LS04	3
12	IC4	33003			74LS02	1
11	IC3	33001	L.S	I.C	74LS00	2
10	IC2	32156	STATIC RAM	2114-4	2	
9	IC1	AAT 32091	DYNAMIC RAM	THS4060M	16	
8	IS	AAO 55812	I.C SOCKET	40P	1	
7	SOP	55154	ANGLE PIN HEADER	PS-50PA	4	
6	S	17652	CONNECTOR STICKER	S	1	
5	R	17659		R	1	
4	Q	17656		Q	1	
3	P	AAO 17653	CONNECTOR STICKER	P	1	
2	B.S	RTO 17657	P.C BOARD STICKER		1	
1		AAO 17759	C.P.U PC BOARD (B)		1	
Part No.	SYM	Part No.	NOMENCLATURE OR DESCRIPTION			

PARTS LIST

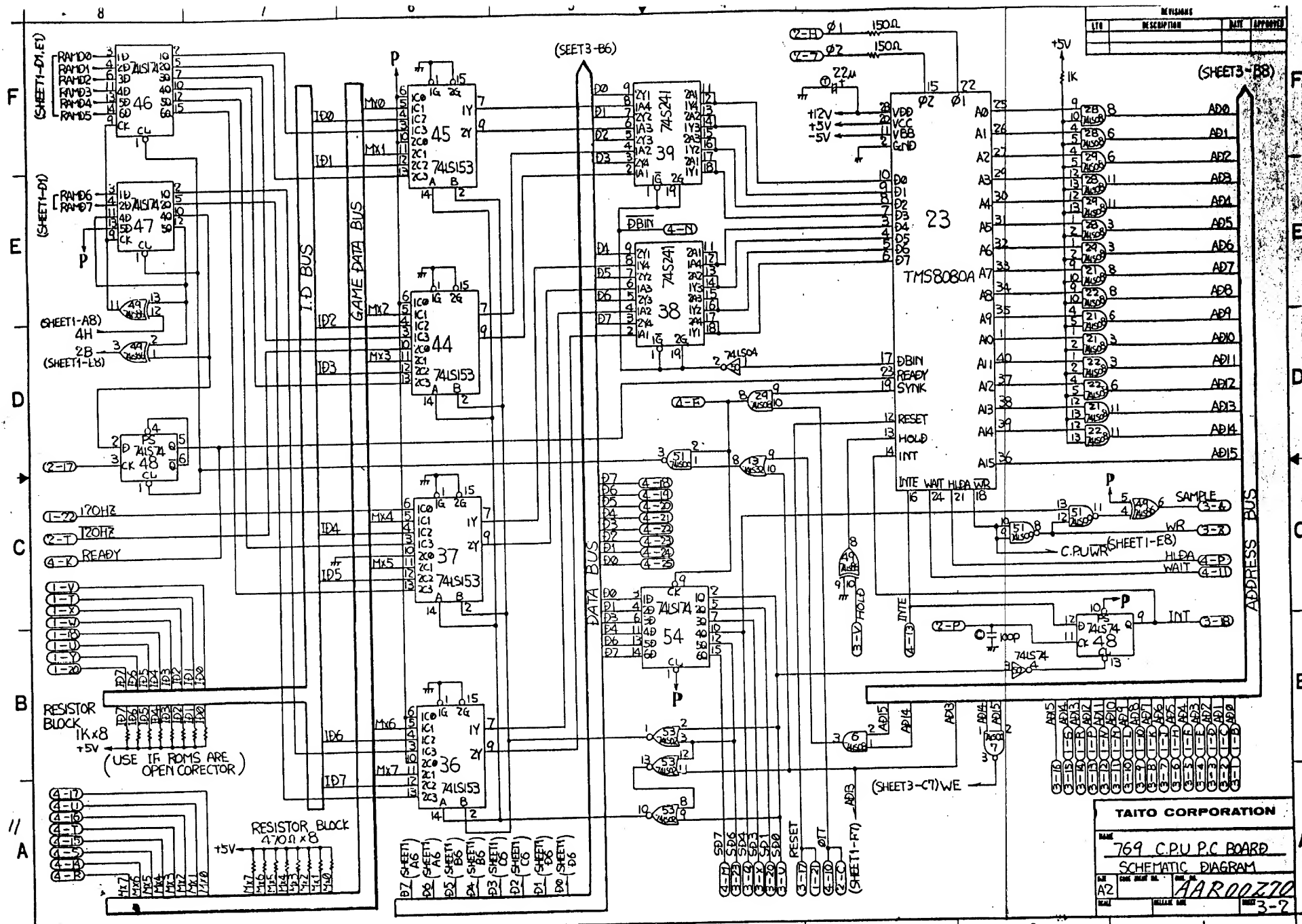
TAITO CORPORATION
 NAME T.T. SPACE CHASER
 769-C.P.U PC BOARD ASSY

DATE 1/1/80
 AZ RTN00005
 SCALE 1/1

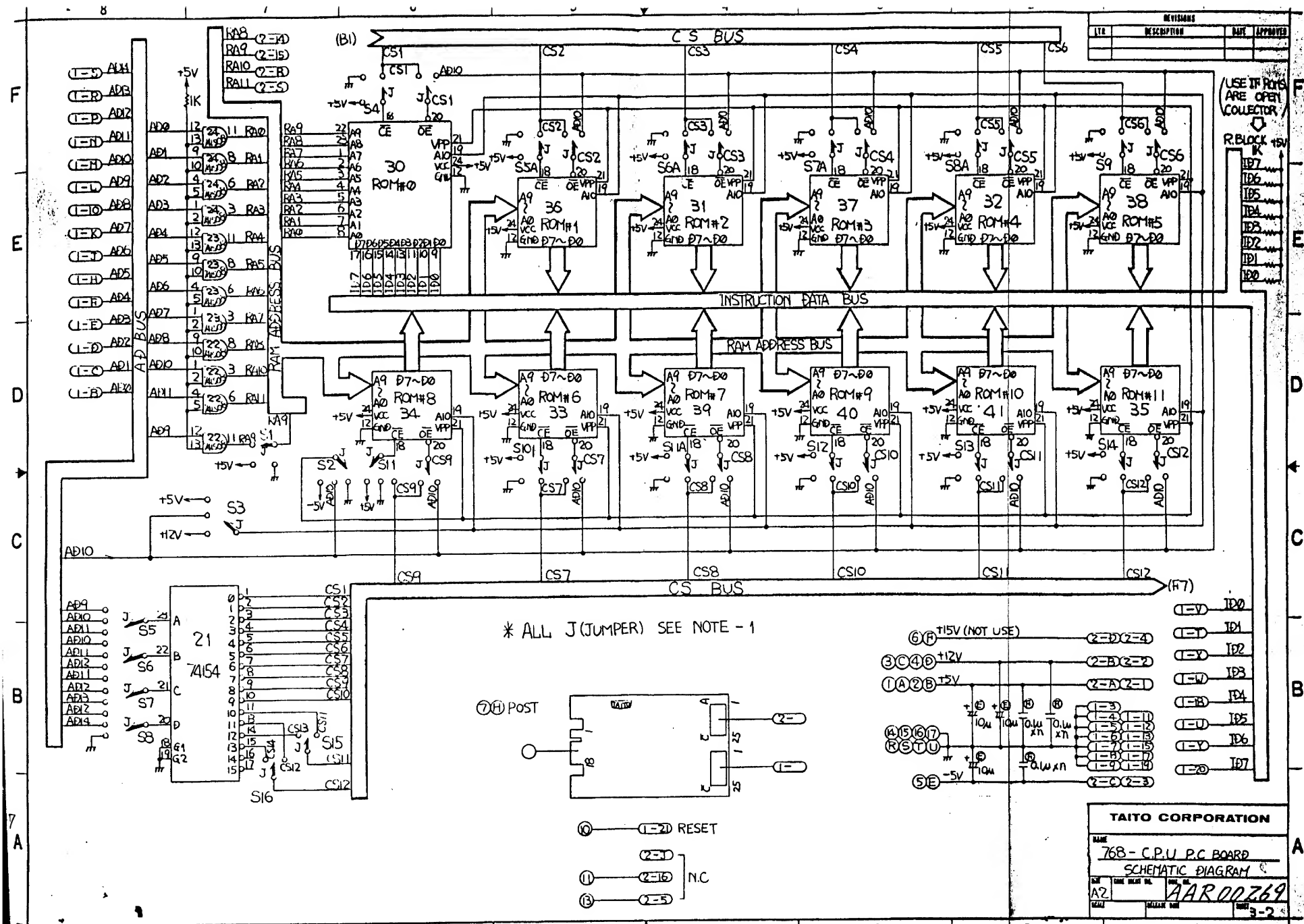


REVISIONS			
LYR	DESCRIPTION	DATE	APPROV

TAITO CORPORATION			
NAME _____			
769 CPU P.C BOARD			
SCHEMATIC DIAGRAM			
DATE	DATE ORDERED	DATE	
A2			AR00270
PRICE	RELEASE DATE	PAGE 3-	



NAME	CARD NO.	DATE
A2		PSN 00002



REVISIONS			
LTG	DESCRIPTION	DATE	APPROVED

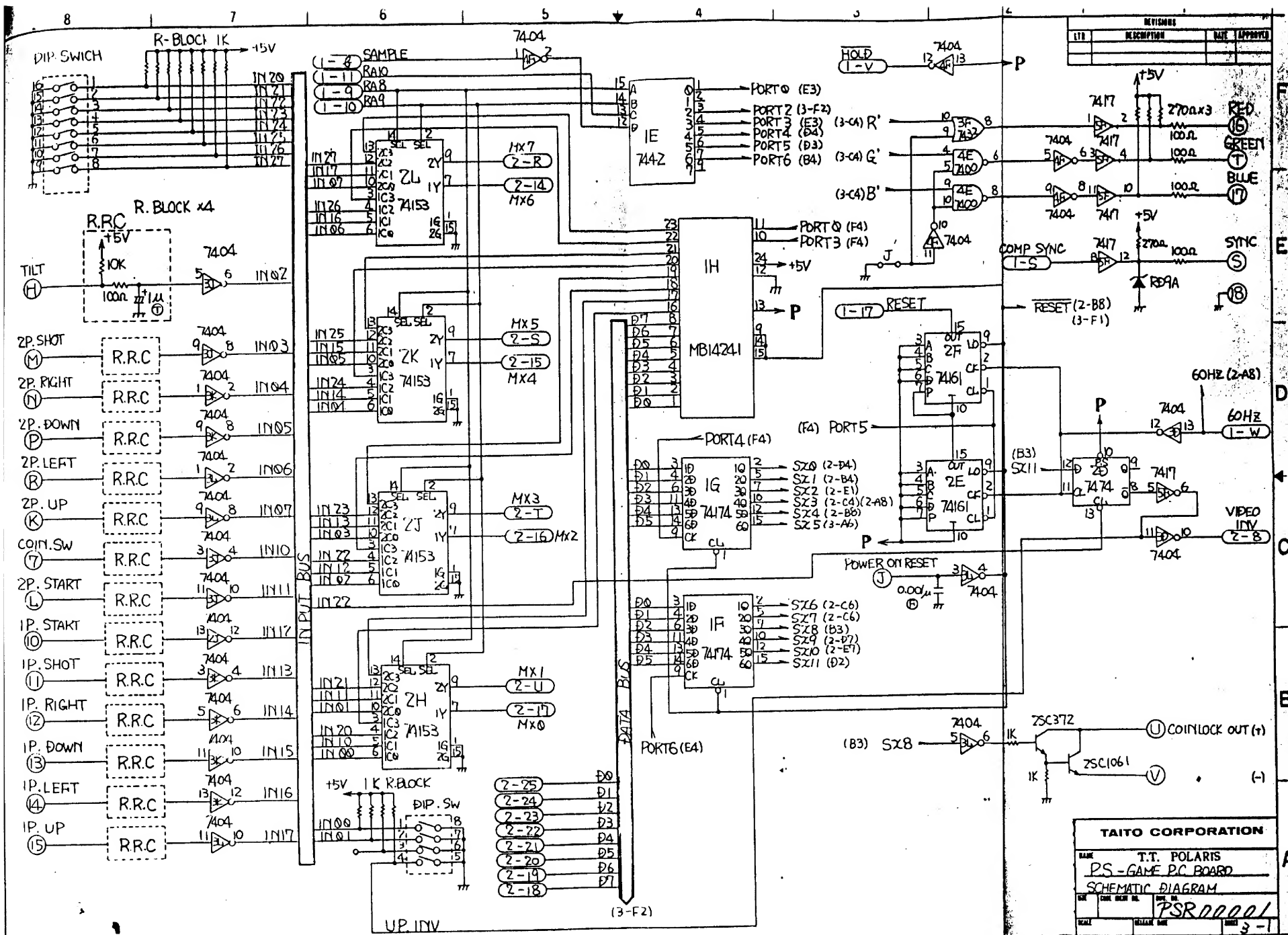
MACHINE NAME	JUMPER SWITCH																								
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25
LUPIN the III	RA9	+5V	AD0	CS1	AD1	AD2	AD3	GND	CS6	CS7							CL1	+5V	CS2	CS3	CS4	CS5	CS1	CS2	CS3
ASTRO ZONE	RA9	+5V	AD0	CS1	AD1	AD2	AD3	GND									CL1	+5V	CS2	CS3	CS4	CS5	CS1	CS2	CS3
POLARIS	RA9	+5V	AD0	CS1	AD1	AD2	AD3	GND	CS6								CL1	+5V	CS2	CS3	CS4	CS5	CS1	CS2	CS3

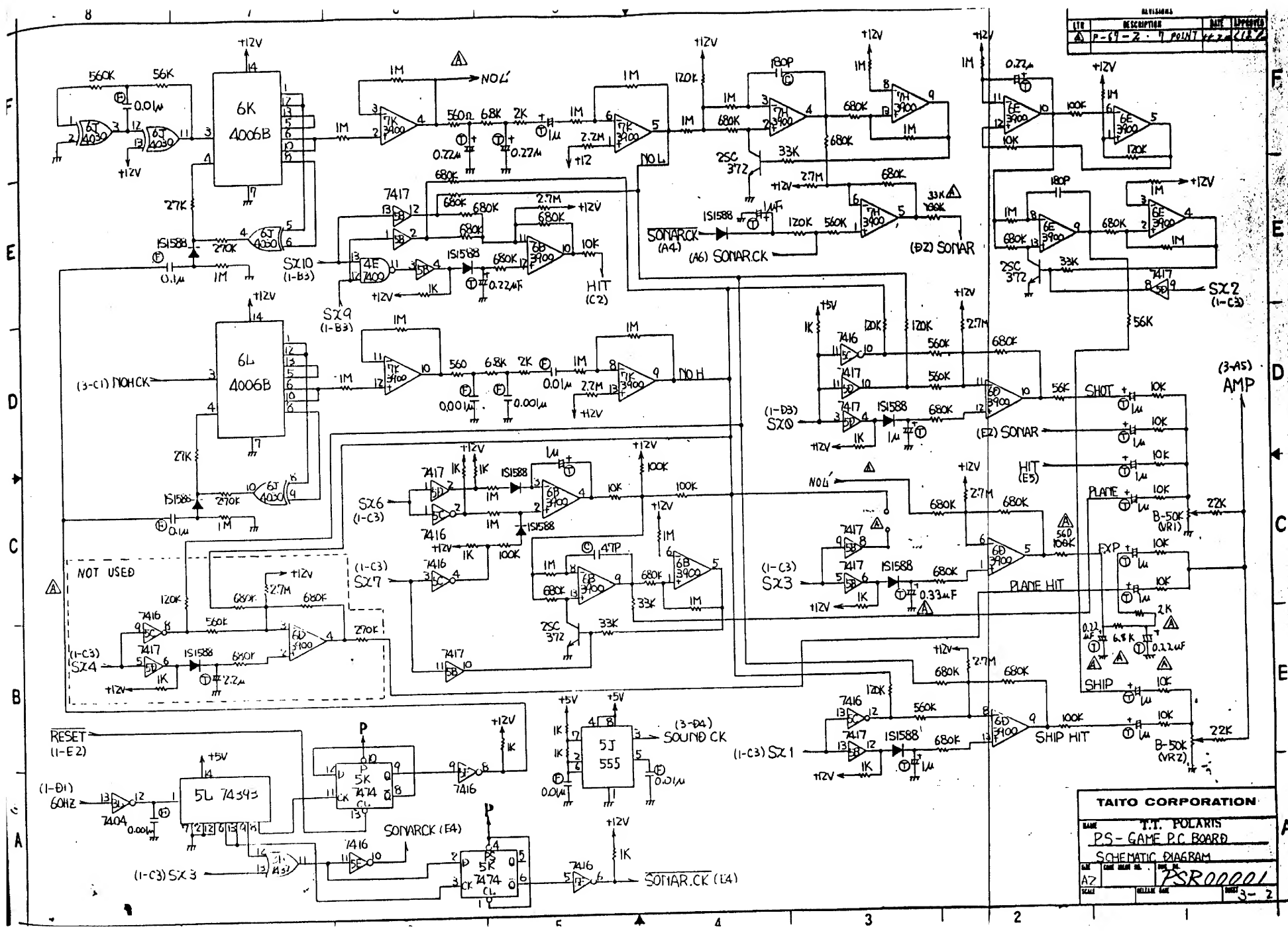
NOTE - JUMPE WIRING

ROM													DESCRIPTION
MACHINE NAME	ROM#0	ROM#1	ROM#2	ROM#3	ROM#4	ROM#5	ROM#6	ROM#7	ROM#8	ROM#9	ROM#10	ROM#11	
LUPIN the III	LP-12	LP-13	LP-14	LP-15	LP-16	LP-17	LP-18						2716
ASTRO ZONE	GE-01	GE-02	GE-03	GE-04	GE-05								2716
POLARIS	PS-01	PS-02	PS-03	PS-04	PS-05	PS-06							2716

NOTE - 2 P-ROM

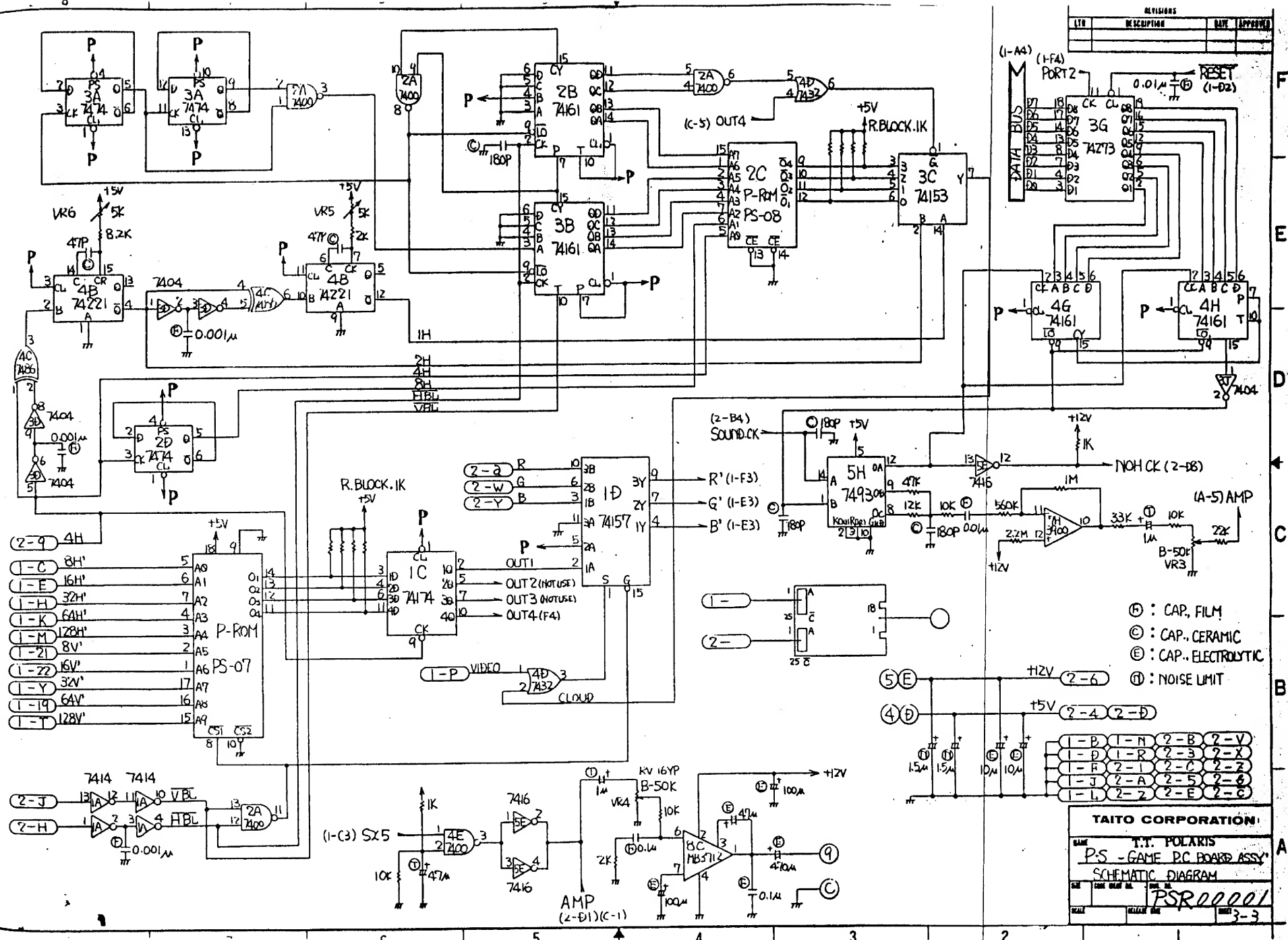
TAITO CORPORATION	
NAME	768-CPU PC BOARD
SCHEMATIC DIAGRAM	
DATE	2000.7.69
BY	3-3





REV	DESCRIPTION	DATE	APPROVED
1	PS-Game P.C. Board	11/22/82	CLB

TAITO CORPORATION			
NAME	T.T. POLARIS		
NAME	PS-Game P.C. Board		
NAME	SCHEMATIC DIAGRAM		
DATE	11/22/82	SCALE	1:1
REV	1	DATE	11/22/82
REV	1	DATE	11/22/82



IST			
TAITO CORPORATION			
NAME CREDIT P.C. BOARD ASSY.			
S/N A3	PROD. DATE / NO.	DWC. NO. AAM50011-E	
SCALE 1/1	MILLAGE	DATE	SHEET

